ion Serial No.: 10/620,749

Attorney Docket No: 5701-01293

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Shan CONG et al.

Group:

Serial No.: 10/620,749

Examiner:

Filed: 15 July 2003

Attorney Docket No.: 5701-01293

For: ROAD CURVATURE ESTIMATION AND AUTOMOTIVE TARGET STATE

ESTIMATION SYSTEM /

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §1.97(b)(1)

15 October 2003

Mail Stop DD **Commissioner for Patents** P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

Applicant submits this Statement in accordance with the duty of disclosure under 37 C.F.R. §1.56 and §§1.97-1.98, and more particularly in accordance with 37 C.F.R. §1.97(b)(1), i.e., filing the statement within three months of the filing date of a national application other than a continued prosecution application under § 1.53(d). Enclosed herewith is the List of References Cited by Applicant (PTO-1449), including copies of all non-patent literature listed thereon. Copies of U.S. patents and U.S. patent application publications are not included herewith in accordance with the waiver published in a Pre-OG Notice dated 07/11/2003 which applies to all applications filed after June 30, 2003.

CERTIFICATE OF MAILING/TRANSMISSION (37 C.F.R. section 1.8(a))

I hereby certify that, on the date shown below, this correspondence is being:

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Kurt L. VanVoorhies

(type or print name of person certifying)

Date: ___15 October 2003

As all the references listed on attached Form PTO-1449 are in English, under 37 C.F.R. §1.98(a)(3), no further commentary is believed to be necessary. Applicant respectfully solicits the Examiner's consideration of the cited references and entry thereof into the record of this application.

Applicant, by submitting this Information Disclosure Statement, is attempting to fully comply with the duty of candor and good faith mandated by 37 C.F.R. §1.56. As such, this Information Disclosure Statement is not intended to constitute an admission that any of the enclosed references, or other information referred to therein, is otherwise "material to patentability," as that term is defined in that section.

Dinnin & Dunn, P.C. 2701 Cambridge Court, Suite 500 Auburn Hills, MI 48326 5701-01293 15 October 2003

Enclosure

Respectfully submitted,

Kurt L. VanVoorhies Registration No. 38,643

Phone: 248-364-2100

Facsimile: 248-364-2200



Based on Form P10-1449 (3/90)				ATTY, DOCKET NO. 5701-01293		SERIAL NO. Page 1 10/620,749		
				FILING DATE	- 13-11	15.004	ahan 2002	
			11.9	15 July 2003 PATENT DOCUMENTS		15 Oct	ober 2003	
			0. 3.	PATENT DOCUMENTS				
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPLICABLE	
	AA	2,709,804	5/31/1955	Chance et al.	342	96		
	AB	3,177,485	4/6/1965	Taylor, Jr.	342	96		
	AC	3,603,994	9/7/1971	Williams et al.	342	96		
	AD	3,699,573	10/17/1972	Andrews et al.	342	96		
	AE	3,725,918	4/3/1973	Fleischer et al.	343	5 EM		
<u></u>	AF	3,869,601	3/4/1975	Metcalf	392	450		
	AG	3,971,018	7/20/1976	Isbister et al.	343	5 CD		
-	АН	4,623,966	11/18/1986	O'Sullivan	364	461		
	Al	5,051,751	9/24/1991	Gray	342	107		
	AJ	5,138,321	8/11/1992	Hammer	342	36	·	
	AK	5,170,440	12/8/1992	Сох	382	199	_	
			FOREIG	IN PATENT DOCUMENTS				
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION Yes No	
	AL							
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		отн	ER PRIOR ART (Inclu	ding Author, Title, Date, Pertinent P	ages, Etc.)			
	AR			sive 3-D Road and Relative Vol. 14, No. 2, Feb. 1992		gnitiion," <i>IEEE</i>	Transactions o	
	AS	Hsu, J.C.; Chen, W. L.; Lin, R. H; Yeh, E. C.; "Estimations of previewed road curvatures and vehicular motion by vision-based data fusion scheme," <i>Machine Vision and Applications</i> , Vol. 9, 1997, p. 179-192.						
	AT	Barber, P.A.; King, P.; Richardson, M.; "Road lane trajectory estimation using yaw rate gyroscopes for intelliger vehicle control," <i>Transactions on the Institute of Measurement and Control</i> , Vol. 20, No. 2, 1998, pp. 59-66.						
XAMINER		DATE CONSIDERED						



Based on Form PTO-1449 (3/90)				ATTY. DOCKET NO.		SERIAL NO. Page 2			
3/30/				5701-0129	93	10/620,7	49 		
				APPLICANT Shan CONG et al.					
				FILING DATE					
				15 July 2003		15 October 2	2003		
			U. S.	PATENT DOCUMENTS					
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPLICABLE		
	ВА	5,202,691	4/13/1993	Hicks	342	90			
	вв	5,307,289	4/26/1994	Harris	364	400			
	вс	5,314,037	5/24/1994	Shaw et al.	180	169			
	BD	5,343,206	8/30/1994	Ansaldi et al.	342	70			
	BE	5,402,129	3/28/1995	Gellner et al.	342	70			
	BF	5,406,289	4/11/1995	Barker et al.	342	96			
	BG	5,471,214	11/28/1995	Faibish et al.	342	70			
	вн	5,530,651	6/25/1996	Uemura et al	364	461			
	ВІ	5,537,119	7/16/1996	Poore, Jr.	342	96			
	BJ	5,587,929	12/24/1996	League et al.	342	159			
	вк	5,594,414	1/14/1997	Namngani	340	436			
			FOREIG	N PATENT DOCUMENTS					
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION Yes No		
	BL								
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	во								
	BP								
		ОТН	ER PRIOR ART (Includ	ling Author, Title, Date, Pertinent P	ages, Etc.)				
	BR	Schiffmann, J.K.; Widmann, G.R.; "Model-Based Scene Tracking Using Radar Sensors for Intelligent Automotive Vehicle Systems," IEEE International Radar Conference, 1998, pp. 421-426.							
	BS	Jilkov, V.P.; Angelova, D Maneuvering Target Trac pp. 343-350.							
	ВТ	Tsang, S. H.;. Hoare, E. C Trajectory," IEEE Interna		rke, N. J.; "Automotive Ra ference, 1999, p. 867-870.	adar Image Proc	essing To Predic	t Vehicle		
				DATE CONSIDERED					

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Based on Form PTO-1449 (3/90)			ATTY. DOCKET NO. 5701-012	SERIAL NO. Page 3 10/620,749				
				APPLICANT	.93	10/020,7	4 2	
				Shan CONG et al.				
				FILING DATE				
				15 July 2003		15 October 2003		
			U. S.	PATENT DOCUMENTS				
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE I APPLICABLE	
	CA	5,598,164	1/28/1997	Reppas et al.	342			
	СВ	5,627,768	5/6/1997	Uhlmann et al.	702			
	СС	5,631,639	5/20/1997	Hibino et al.	340			
	CD	5,633,642	5/27/1997	Hoss et al.	342			
	CE	5,657,251	8/12/1997	Fiala	343			
	CF	5,668,739	9/16/1997	League et al.	382			
	CG	5,684,473	11/4/1997	Hibino et al.	340			
	СН	5,689,264	11/18/1997	Ishikawa et al.	342			
	CI	5,703,593	12/30/1997	Campbell et al.	342			
	CJ	5,926,126	7/20/1999	Engelman	342			
	СК	5,948,043	9/7/1999	Mathis	701			
	•		FOREIG	N PATENT DOCUMENTS	•			
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION Yes No	
	CL							
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	СР							
		ОТН	ER PRIOR ART (Include	ding Author, Title, Date, Pertinent F	ages, Etc.)		<u> </u>	
	CR	Jula, H.; Kosmatopoulos, Report, University of Sou		'Collision Avoidance Anal 1999.	ysis for Lane Cha	anging and Merg	ging," Technica	
	cs			nicle Dynamics and Extern Systems Technology, Vol.				
	СТ			rative Analysis of Alternatiusion, Vol. 2, 2000, pp. W		et Tracking Tecl	nniques," in	
EXAMINER				DATE CONSIDERED				



	C DEVI			I		T		
Based on Form PTO-1449 (3/90)			ATTY, DOCKET NO.	SERIAL NO. Page 4 10/620,749				
							5701-012	
				Shan CONG et al.				
				FILING DATE				
				15 July 2003		15 October 2003		
			U. S.	PATENT DOCUMENTS				
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE I APPLICABLE	
•	DA	5,959,552	9/28/1999	Cho	340	903		
	DB	5,959,574	9/28/1999	Poore, Jr.	342	96		
-	DC	5,983,161	11/9/1999	Lemelson et al.	701	301		
	DD	6,070,121	5/30/2000	Matsuda	701	205		
	DE	6,085,151	7/4/2000	Farmer et al.	342	70		
	DF	6,134,509	10/17/2000	Furusho et al.	702	167		
	DG	6,161,071	12/12/2000	Shuman et al.	701	48		
	DH	6,198,426 B1	3/6/2001	Tamatsu et al.	342	70		
	DI	6,226,389 B1	5/1/2001	Lemelson et al.	382	104		
	DJ	6,275,231 B1	8/14/2001	Obradovich	345	349		
	DK	6,275,773 B1	8/14/2001	Lemelson et al.	701	301		
		·	FOREIG	IN PATENT DOCUMENTS	· • • · · · · · · · · · · · · · · · ·		<u> </u>	
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		ОТН	IER PRIOR ART (Inclu	ding Author, Title, Date, Pertinent P	ages, Etc.)		•	
	DR	Miyahara, S.; "A Method Congress, 2003-01-0013,		Target Tracking in Non-Un	niform Road Con	dition," SAE 20	03 World	
	DS			Model-based statistical tracl University, LiTH-ISY-R-24		n making for col	lision avoidanc	
	DT			er, E.; "Using Bayesian Proceediings of the IEEE Int. (
EXAMINER			DATE CONSIDERED					



Based on Form PTO-1449 (3/90)				ATTY. DOCKET NO. SERIAL NO. 10/620,749			Page 5
				APPLICANT	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	20.020,,	
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				FILING DATE			
		_		15 July 2003		15 Oct	ober 2003
		· · · · ·	U.S.	PATENT DOCUMENTS			
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPLICABLE
	EA	6,343,253 B1	1/29/2002	Matsuura et al.	701	200	
	EΒ	6,370,475 B1	4/9/2002	Breed et al.	701	301	
	EC	6,405,132 B1	6/11/2002	Breed et al.	701	301	
	ED	6,420,997 B1	7/16/2002	Cong	342	70	
	EE	6,470,272 B2	10/22/2002	Cong et al.	701	301	
	EF	2002/0022927 A1	2/21/2002	Lemelson et al.	701	301	
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